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## The gender of *Podarcis* and the virtues of stability, a reply to W. Böhme

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Abstract. It has recently been suggested that the gender of *Podarcis* (the European and Northwest African Wall lizards) is masculine, which would change the accepted endings of the names of six species and additional subspecies. This course is rejected, on the basis of the invalidity of the arguments put forward for masculine gender, its potential disturbance of the settled nomenclature and the confusion it would cause among non-specialist users.

Key words. Nomenclature, taxonomy, Reptilia, Sauria, Lacertidae, Podarcis, lizards.

The genus *Podarcis* comprises the Wall lizards of Europe and Northwest Africa, a much-studied and cited group of sixteen species. *Podarcis* has usually been treated as feminine but Böhme (1997, 1998) argues that it is really masculine. Here, the history of the name and Böhme's arguments are examined and the case for stability of scientific names reiterated.

Wagler (1830) proposed the generic name *Podarcis* for three species of lacertid lizards, originally described as *Seps muralis* (Laurenti 1768), *Lacerta velox* (Pallas 1771) and *Lacerta grammica* (Lichtenstein 1823), but did not designate a type species. He gave no explicit indication of the gender of *Podarcis*, a latinisation of the Greek adjective,  $\pi\sigma\delta\alpha\rho\kappa\eta$ s (podarcis, -es, -e) which has the same ending in the masculine and feminine nominative form, so there is no internal indication as to which gender Wagler intended it to be. He did not use *Podarcis* in combination with the trivial names of the species he included, so these also give no indication of gender. This is also the case with some other early users, including Ménétriés (1832), Wiegmann (1834) and Eichwald (1841).

Bonaparte (1836) treated *Podarcis* clearly as feminine in his text, using the combinations *Podarcis taurica*, *Podarcis oxycephala* and *Podarcis muralis sicula*. The publication also has the name *P. muralis siculus* in a plate caption, with two illustrated variants named as *olivaceus albiventris* and *maculatus rubriventris*, but this indication of a masculine gender is likely to be a lapsus, given the feminine usage in two separately published sections of the text, one of which precedes the plate in question. Assignment of a feminine gender to *Podarcis* by this author is confirmed by subsequent use of *P. taurica* and *P. oxycephala* (Bonaparte 1839).

Both Wiegmann (1834) and Fitzinger (1843) appeared to designate a type species for *Podarcis*, by only listing *Podarcis muralis* under the genus, but again there is no explicit statement about gender and no indication from the trivial name, as *muralis* also has the same ending in the nominative masculine and feminine.

Like Bonaparte, later users have conferred female gender on *Podarcis*, including Strauch (1868, 1876), Gistel (1868), De Betta (1874, 1879), Camerano (1877, 1878), Bedriaga (1879) and Boettger (1880, 1881). Fitzinger (1853) does treat *Podarcis* as

masculine in the nomina nuda *P. merremii* var. *maculatus* and *P. m.* var. *olivaceus*, but this is a very minority use.

Podarcis later fell out of use as a genus, although it was often employed as a subgenus of Lacerta (for instance by Boulenger 1920). Arnold (1973) again raised Podarcis to generic status and, following the overwhelming usage of previous workers, retained a feminine gender for it. Since then, this has been very consistently followed. For instance, the BIDS Science Citation Index lists 100 instances where Podarcis sicula has been used in the titles, keywords and abstracts of articles between 1981 and 1999, but none where the masculine form, Podarcis siculus, is employed.

Recently, Böhme (1997) has suggested that the gender of *Podarcis* is male. His stated grounds are as follows.

- 1. "Wagler was surely aware of 'podarkis' being an adjective particularly attributed to the ancient hero Achilleus in the classic Greek (Homerian) literature, i.e. a clearly masculine attribution!" This is pure supposition as Wagler makes no statement to this effect. The fact remains that *Podarcis* can be used for both the male and femalegenders. Later, Böhme admits this, noting also that the three species placed in *Podarcis* by Wagler include male and female forms in their original binomial combinations.
- 2. Fitzinger selected, as a type of the genus *Podarcis*, *Seps muralis* which is masculine and "this has to be accepted as the establishment of gender". This is not correct. The gender of the latin word "seps" is not specifically masculine but of common gender (Simpson 1959). There is also no statement in the *International Code of Zoological Nomenclature* that the gender of a genus to which a species was previously assigned, either at its description or subsequently, determines the gender of a genus into which the species is later put, if this is undetermined at the time. Also, Fitzinger does not specifically mention *Seps* and, between description as *Seps muralis* and inclusion in *Podarcis* by Wagler, *P. muralis* was frequently allocated to *Lacerta* and thus assigned a female gender, for example by Sonnini and Latreille (1802) and Milne Edwards (1829).

Böhme's arguments have been both accepted explicitly, by the editors of *Die Eidechse* ('Die Redaktion' 1997) and argued against (Mayer 1998). If Böhme's suggestion were generally accepted, the names of six species of *Podarcis*, and those of a number of subspecies would have to be changed. The species names are: *atrata*, *hispanica*, *peloponnesiaca*, *sicula*, *taurica* and *wagleriana*. In the case of *P. tiliguerta*, the trivial name is believed to be a noun in apposition (Claudia Corti, quoted in Böhme 1998), and so is unaffected by the gender of *Podarcis*.

The allocation of masculine gender to *Podarcis* is not justified by the arguments put forward and would overturn what is now established use. Change would have no tangible benefit in terms of stability or ease of use and would contravene the spirit of the *International Code of Zoological Nomenclature* (International Trust for Zoological Nomenclature 1999) which promotes the stability of names, for example in the Preamble (p. 2) and in Articles 23.2 and 81. It would cause confusion to both systematists and the much larger number of other users of the names concerned. For example, the editors of the journal *Die Eidechse* (8/2, 1997) approve the use of the masculine form of *Podarcis sicula* and it is used in the title and text of an article, but the title in the contents list of the journal employs the feminine form! Non-

systematists, especially, are likely to be misled by the proposed change into thinking there are more taxa than there actually are.

It is important to always remember that scientific nomenclature, especially that of popular and frequently cited taxa, is not just a playground for systematists (like Dr Böhme and myself). The names are for the use of a far wider community including not only biologists but many other people who rely on precise scientific designations, among them lawyers, customs officers, doctors and hobbyists. It is sometimes said that people with a specialist interest in a group soon get used to change (e.g. Böhme 1998), but this misses the point: it is the non-specialists, of whom there are far more using scientific names, who suffer either directly or indirectly. Systematists are often asked to check manuscripts or printed lists of species for other users and a taxon frequently turns up under several aliases because the name assigned to it has changed over time, to the confusion of all concerned. Name change is also confusing in literature search and when using data banks, for if different names have been employed for a taxon, only a proportion of citations will be found by using one of them. Specialists of course know about synonyms and where to look them up, but this does not apply to name-users in general.

Of course, some change is unavoidable. For instance when a new species is recognised among material previously assigned to another long-established one. Also, under the binomial system, where the genus forms an integral part of the species name, some change is inevitable. For example, if some species in a genus are found to be more closely related to those in another than to their present congenerics. However, other changes, for instance when a group within a known clade is separated as a new genus, can be avoided by using subgenera.

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